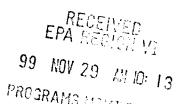
Robert J. Huston, *Chairman*R. B. "Ralph" Marquez, *Commissioner*John M. Baker, *Commissioner*Jeffrey A. Saitas, *Executive Director*





TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

November 16, 1999

Mr. Win Turner
Project Coordinator
KMA Environmental Services, Inc.
P.O. Box 92
Texas City, TX 77592-0092

Re: Review of Phase I Environmental Site Assessment, 600 51st Street, Galveston Texas October 26, 1999 and Phase II Environmental Site Assessment, 600 51st Street, Galveston Texas October 29, 1999 - Estate of William R. Black, Deceased Site, Galveston, Galveston County, TX; Voluntary Cleanup Program (VCP) No. G17

Dear Mr. Turner:

The Texas Natural Resource Conservation Commission (TNRCC) has completed review of the above referenced documents from the stand point of providing technical assistance to the city and other stakeholders in regards to any additional work necessary to further assess and cleanup the site and to receive a VCP Certificate of Completion (COC). The COC is the legal instrument granting a release of liability from the state to all future owners and lenders regarding environmental contamination. It is anticipated that the environmental data presented in this and future reports along with the COC, may facilitate local redevelopment of the property.

The TNRCC's comments based on the assessment performed by its contractor, IT Corporation are as follows:

- 1. Contaminants of Concern. The TNRCC believes that Total Petroleum Hydrocarbons (TPH) in the C11-C22 Aromatic range and isolated spots of lead appear to be the only contaminants of concern which are above the commercial/industrial soil Protective Concentration Levels (PCLs) for both human exposure (TotSoilcomb) and groundwaterprotection (CowSoil) per 30 Texas Administrative Code (TAC) 350 Texas Risk Reduction Program (TRRP). The critical PCL (defined as the lower of (TotSoilcomb) or groundwater protection (CowSoil) for the two contaminants) is as follows:
 - a. TPH C11-22 Aromatics 2,300 mg/kg. This PCL was derived by combining published Tier 1 Commercial/Industrial default groundwater protection (awSoil) values for <10-12 C Aromatics, 12-16 C Aromatics, 16-21 C Aromatics and 16-21 C Aromatics. Combining of values was acceptable in this instance, because the laboratory chose to report the analytical results using analytical method TNRCC 1006.

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- b. Lead 3.0 mg/kg. This PCL was derived from published Tier 1 Commercial/. Industrial lookup tables for groundwater protection (^{GW}Soil).
- c. Lead (default background) 15 mg/kg. This PCL was derived from published default background concentrations as per 30 TAC 350.51(m).

2. Nature and Extent of Contamination:

- a. **TPH.** The TNRCC believes the reports demonstrate that the TPH is limited to the shallow surface soils and the extent of TPH contamination has been fully delineated in the vertical and lateral directions as required under 30 TAC §333.7.
- b. Lead. The TNRCC believes that the reports do not demonstrate the full nature and extent of lead contamination and that more assessment is required in both the lateral and vertical directions as required under 30 TAC §333.7.
- 3. **Remedial Alternatives.** Based on experience with similar sites, and once the investigation is complete, the TNRCC recommends either one or a combination of the following remedial approaches to best achieve cleanup in a straightforward manner under applicable TNRCC rules to receive a COC:
 - a. **Removal of Contaminated Soils.** Removal of contaminated soils to concentrations below the default critical PCLs specified in comment No. 1 above with follow-up confirmation sampling. Regarding TPH C11-22 Aromatics, confirmation samples should be collected, analyzed by Method TNRCC 1006, and the results compared to the appropriate Tier 1 groundwater protection PCLs (cwSoil).
 - b. Determining Groundwater Protection Concentrations for Soil. Determination of soil concentrations which will not leach contaminants to groundwater is an option available under the TRRP. The most straightforward way to establish this concentration is to have soil samples (including soil samples most affected) containing contaminants of concern over a range of concentrations analyzed utilizing the Synthetic Precipitate Leachate Procedure. While this method works well for most contaminants, it may not result in a higher cleanup level than the default levels when performed on lead. However, this approach has shown to be effective with TPH. Also, because the original sample material was discarded by the laboratory, new samples will have to be obtained. As an alternative to the leaching test, a Soil Attenuation Model utilizing site specific inputs can also be used to make this demonstration.

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- c. **Determining Background Concentrations.** A site specific background concentration may result in a cleanup level greater than the default Commercial/ Industrial critical PCL for lead. This may not be the result for TPH.
- 4. Amendment to the VCP Agreement for Remedy Implementation. Should the city and other stakeholders wish to go forward with remedy implementation, the TNRCC will ask the City of Galveston to submit a VCP Agreement with a schedule to conduct remedy implementation. The structure of the schedule will depend on the type of remedy that is ultimately chosen for this site.
- 5. Additional TNRCC Brownfields Services. The TNRCC is prohibited from expending funds for cleanup activities that may be necessary following the investigation. However, subject to funding and at the city's request, the TNRCC is available to conduct the additional assessment work specified in Comment No. 2.b, No. 3.b and/or No. 3.c above. Also, as stated in the TNRCC's letter dated May 27, 1999, VCP oversight fees will continue to be waived during the remedy implementation period (subject to funding).

Should you wish to discuss the mechanics of cleaning up this property to receive a COC or wish to discuss another Brownfields project, please contact me at 512-239-2253.

Sincerely,

Byron J. Ellington, CPG Brownfields Coordinator Voluntary Cleanup Section Remediation Division

BE/ts

cc: Ms. Paula Ozymy, BSAPP Project Director, City of Galveston
Mr. Stan Hitt, Brownfields Coordinator, U.S. Environmental Protection Agency, Dallas

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